



IOWA PUBLIC HEALTH TRACKING

PUBLIC HEALTH ACTION

Improvement of Communicable Disease Surveillance Activities

The Iowa Department of Public Health (IDPH) Center for Acute Disease Epidemiology (CADE) produces a weekly surveillance report for internal use to manage case follow-up and identify potential clusters of disease. The data covers two week and four data trends along with comparison measures to the previous 5 years of data, and is extracted from the Iowa Disease Surveillance System (IDSS).

What was the Problem/Situation?

Previously the report was generated by epidemiologic staff generating a series of static data table reports that were then appended into a single document for distribution. This static report format limited the programs ability to fully evaluate the data for potential epidemiologic associations or trends. An interactive report that was able to present both summary data and row level details in a single presentation was desired to increase the effectiveness of epidemiologic surveillance activities.

How was Iowa Public Health Tracking Involved?

CADE asked the Iowa EPHT program to assist them in leveraging the new Tableau Platform to develop a new weekly surveillance report that was able to analyze and interactively display the surveillance data for use by state epidemiologists.

What Action was Taken to Solve the Problem/Situation?

The programs worked together to streamline the data extraction, transformation, and load (ETL) processes to feed data into the Tableau platform, and develop the interactive Tableau visualizations that could be published on the department's internal server. The interactive report also includes the ability to organize and view the data geographically in a way that was not available in the previous report. CADE began utilizing the new interactive weekly surveillance report in June 2018. The interactive report is reviewed and discussed via a weekly staff meeting using the Zoom webinar platform. The report has had a two-fold impact on CADE activities:

- The transition to the Tableau platform has reduced the staff time burden to prepare and disseminate the weekly report, freeing up time to conduct deeper epidemiologic analysis of the data.
- The interactive data presentation has increased the programs capability to conduct epidemiologic surveillance, and analyze and evaluate the data to identify patterns, trends and potential outbreaks of disease that were not identifiable through the previous report format.

In the 7 months since the new report was introduced, each week CADE is able to more effectively identify and evaluate 3-5 potential clusters of disease, and 30-35 reports of foodborne illness with restaurants listed in the food history.

